

CLAIMS

1. A communication control method for controlling communication between wireless communication apparatuses that are capable of communicating wirelessly in a first communication mode in which communication is performed via a base station and a second communication mode in which communication is performed with a wireless communication apparatus directly, said method comprising:
 - 10 a connecting step of connecting a first wireless communication apparatus to a second wireless communication apparatus if, during communication by the first wireless communication apparatus in the first communication mode, the first wireless communication apparatus receives a search signal from
 - 15 the second wireless communication apparatus giving notification of the existence of the second wireless communication apparatus;
 - a determining step of determining, by the second
 - 20 wireless communication apparatus, whether the first wireless communication apparatus possesses a desired function; and
 - a data transmitting step of transmitting data from the second wireless communication apparatus to
 - 25 the first wireless communication apparatus in the second communication mode based upon result of the determination performed at said determining step.

2. A wireless communication apparatus capable of communicating with a wireless communication apparatus in a first communication mode in which communication is performed via a base station and a second
5 communication mode in which communication is performed with the wireless communication apparatus directly, said apparatus comprising:

receiving means for receiving a signal from another wireless communication apparatus giving
10 notification of the existence of said other wireless communication apparatus, during communication in the first communication mode;

connecting means for making a connection to said other wireless communication apparatus based upon
15 information contained in the signal received by said receiving means; and

data receiving means for receiving data, which is transmitted in the second communication mode, in accordance with result of a function determination
20 performed between this apparatus and said other wireless communication apparatus.

3. The apparatus according to claim 2, further comprising printing means for printing an image based upon data that has been received by said data
25 receiving means.

4. The apparatus according to claim 2, wherein said connecting means makes a connection to said other

wireless communication apparatus in the second communication mode.

5 5. The apparatus according to claim 4, wherein said connecting means suspends communication in the first communication mode and makes a connection to said other wireless communication apparatus in the second communication mode.

10 6. The apparatus according to claim 2, wherein said connecting means makes a connection to said other wireless communication apparatus based upon a network identifier contained in the signal received by said receiving means.

15 7. A wireless communication apparatus capable of wirelessly communicating with a wireless communication apparatus directly, comprising:

transmitting means for transmitting a signal, which gives notification of existence of this apparatus, to another wireless communication apparatus;

20 determining means for executing processing, which is for determining a function that is executable with said other wireless communication apparatus, if a connection to said other wireless communication apparatus has been made in response to the signal; and

25 data transmitting means for transmitting data to said other wireless communication apparatus in

accordance with the determination made by said determination means.

8. The apparatus according to claim 7, further comprising picture taking means for taking a picture
5 optically as image data;

wherein said data transmitting means transmits the image data obtained by picture taking by said picture taking means.

- 10 9. The apparatus according to claim 7, further comprising display means for displaying another wireless communication apparatus, which has been determined to possess a desired function, in
accordance with the determination made by said
15 determination means;

wherein a direct connection is made to a wireless communication apparatus, which has been selected by a user, based upon the display presented by said display means, and data is transmitted by said data
20 transmitting means.